

OFFICIAL 2009 - 2011 SPECIFICATIONS FOR NASCAR S-2

NOTICE: ALL EQUIPMENT IS SUBJECT TO THE APPROVAL OF NASCAR TECH OFFICIALS. NO EQUIPMENT WILL BE CONSIDERED AS HAVING BEEN APPROVED BY REASON OF HAVING PASSED THROUGH INSPECTION. ALL NASCAR MEMBERS ARE REQUIRED TO BE FAMILIAR WITH ALL TOYOTA SPEEDWAY AT IRWINDALE TRACK RULES AND NASCAR RACING SERIES RULES PERTAINING TO YOUR DIVISION.

If this rule book does not specifically say that you can change/modify/add something, then you must consider that the change/modification/addition is illegal. The intent of this division and its rules are to create and maintain a safe, competitive, and affordable racecar.

1. Battery:
 - (a) Only a lead cell or gel cell battery may be used.
 - (b) Minimum dimensions are 6" wide x 10" long x 7" tall.
 - (c) Car must run 12 volt electrical system.
 - (d) Battery must remain in its stock location and securely mounted.
 - (e) The original stock battery bracket may not be altered in any way.
2. Body:
 - (a) The only approved body is the Five Star S-2 Sportsman body.
 - (b) All panels must be run as produced by Five Star Race Car Bodies.
 - (c) Body must remain mounted to original body specifications and dimensions.
 - (d) Body must fit Racecar Factory (RCF) template set.
 - (e) A-post windows must be 10" long maximum and have no more than ½" bow outward.
 - (f) No trimming or massaging body parts.
 - (g) Front nose splitter width cannot exceed 75"; measured from left front splitter in front of tire to right front splitter in front of tire at trailing edge of nose.
3. Brakes:
 - (a) All brake parts must remain stock size, shape, weight and material.
 - (b) Front and rear brake calipers must be stock OEM only.
 - (c) Brakes must be operational on all four wheels.
 - (d) Brake lines may not be plugged or completely shut off.
 - (e) No proportioning valves allowed.
 - (f) Only magnetic steel brake rotors allowed.
 - (g) Front brake rotor must be minimum .850 x 11.75"
 - (h) Rear brake rotor must be minimum .800 x 11.75"
 - (i) Brake rotor must be vented.
 - (j) No drilled rotors allowed.
 - (k) No scalloped brake rotors.
 - (l) No brake cooling fans allowed.
 - (m) No brake ducts or holes allowed in nose.
4. Car Number:
 - (a) Must have readable number on sides and roof.
 - (b) Track sponsor decal must be displayed across front window.
5. Chassis:
 - (a) Absolutely no modifications of the chassis will be permitted.
 - (b) Chassis must be raced as produced by RCF.

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- (c) No altering pick up points on chassis.
- 6. Clutch and Flywheel:
 - (a) Flywheel must be 153 tooth OEM magnetic steel only (minimum 16#).
 - (b) Clutch disc must be magnetic steel (minimum 2.5#).
 - (c) Pressure plate must be magnetic steel (minimum 13#).
 - (d) 10.4" stock single disc diaphragm clutch only.
- 7. Driveshaft:
 - (a) Must be 2.75" x .060 magnetic steel only.
 - (b) Must have solid tube yokes.
 - (c) Must use magnetic steel u-joints.
 - (d) Driveshaft must be painted white.
 - (e) Minimum weight is 14#.
- 8. Engine:
 - (a) GM 88958602 factory sealed engine only. All internal components must be stock GM only including valve springs, rocker arms and balancer.
 - (b) Carburetor
 - (1) Holley 3310C is the only approved carburetor.
 - (2) Primary jets and power valve may be replaced with OEM type.
 - (3) Choke flap and linkage mechanism may be removed
 - (4) No other modifications allowed.
 - (5) Secondary diaphragm spring must remain stock.
 - (6) External vacuum ports must be plugged.
 - (7) Carburetor is subject to exchange by tech officials.
 - (c) Ignition
 - (1) Stock OEM HEI Distributor only.
 - (2) Ignition module must remain stock.
 - (3) No billet distributors allowed.
 - (4) Stock OEM distributor cap and rotor only.
 - (5) Plug wires must be maximum 8.5 mm only.
 - (d) C-Air Cleaner
 - (1) Standard metal air filter housing only.
 - (2) Air filter element must be 4" X 14" paper.
 - (3) No air diverters or coatings allowed.
 - (e) Mounts
 - (1) Engine must be centered in chassis.
 - (2) Minimum crankshaft height is 12.5".
 - (3) Transmission mount must remain stock.
 - (f) Heat Shields
 - (1) No heat shields allowed on valve covers.
 - (2) No heat shields allowed on distributor.
 - (3) No heat shielding allowed on fuel line.
 - (g) Cooling
 - (1) One electric fan may be used.
 - (2) Radiator ducting must seal to nose.
- 9. Exhaust System:
 - (a) The headers, exhaust system, muffler and gaskets must remain stock.
 - (b) The internal exhaust components may not be altered in any way.
 - (c) No header wrap allowed on exhaust or headers.
 - (d) Exhaust system may be painted with high heat paint.
 - (e) Exhaust system cannot be ceramic coated.

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10. Front Suspension:
 - (a) All front suspension parts must remain stock, size, weight as delivered by RCF.
 - (b) No altering suspension parts.
 - (c) Upper and lower ball joints must be stock.
 - (d) No low friction ball joints allowed.
 - (e) Lower A-arms must remain stock.
 - (f) Upper A-arms must remain stock.
 - (g) Left front upper a-arm must be 9.5".
 - (h) Right front upper a-arm must be 9".
 - (i) No slotted cross shafts allowed.
 - (j) No bearing cross shaft allowed.
 - (k) Spindles must be stock.
 - (l) Front hubs cannot be lightened or modified.
 - (m) Strut tubes must be aluminum hex only.
 - (n) Tie rod tubes must be aluminum hex only.
 - (o) Steering box must be a GM Saginaw 12 to 1 ratio only.
 - (p) All rod ends must be magnetic steel.

11. Fuel and Fuel Cell:
 - (a) Track fuel only. Fuel must be run as dispensed from pump at track.
 - (b) Fuel cell must remain securely mounted in stock location.
 - (c) Fuel cell must be vented to rear bumper cover.
 - (d) Fuel cell must have a ground strap from fuel cell ring to the chassis.
 - (e) No mixing fuel or fuel additives allowed.
 - (f) No cooling fuel at any time.
 - (g) Fuel line must be steel braided hose.

12. Hardware:
 - (a) All nuts and bolts must be solid magnetic steel only.

13. No Push Rule:
 - (a) Cars must be driven to tech bay and from tech bay to staging area for qualifying.

14. Post Race Tech:
 - (a) Top three finishing cars must report directly to tech area.

15. Heights:
 - (a) All heights will be checked with driver in racecar.
 - (b) Nose Height: minimum 5".
 - (c) Side Skirt Height: minimum 4.5".
 - (d) Frame Height: minimum 4.5".
 - (e) Rear Quarter Panel at Tail and Deck lid: maximum 36".

16. Radios:
 - (a) Two way radios are permitted.
 - (b) Each team must monitor race control during practice, qualifying and race.
 - (c) Radio frequency must be registered with the track.

17. Rear End Gear:
 - (a) Ford 9" mini spool only.
 - (b) Rear gear ratio must be 4.56 only.
 - (c) No lightening or back cutting gears.

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(d) No lightweight yokes allowed.

18. Rear Suspension:

- (a) All suspension mounts and pick up points must remain stock.
- (b) All trailing arm tubes must be aluminum hex tubing.
- (c) All rod ends must be magnetic steel 3/4" diameter.
- (d) No quick adjusters allowed on track bar or top link.
- (e) Brackets on rear end housing may not be moved or slotted.
- (f) Rear axles must be solid magnetic steel.
- (g) No cambered rear end housing.

19. Rear Wing:

- (a) The rear wing must be mounted in original location.
- (b) Rear wing must be mounted with approved mounts.
- (c) Rear wing must fit Sportsman wing RCF template.
- (d) Nothing can be changed on the rear wing.
- (e) Rear wing tether must be attached at all times with approved hardware.

20. Safety:

- (a) Seat belts must be 3" wide latch and link style.
- (b) Seat belts must be SFI rated and dated within two years.
- (c) Window net must be SFI rated and dated within three years.
- (d) A professional racing seat is required.
- (e) Seat must be made out of aluminum.
- (f) Seat must attach to chassis at six points w/3/8" grade 8 hardware.
- (g) Approved 5# fire suppression system mandatory.

21. Shocks:

- (a) Shock numbers must remain stamped on shock.
- (b) Must use the following approved shocks:
 - (1) RCF 310-42173/5, RCF 310-42174
 - (2) RCF 310-42175, RCF 310-42174/6
- (c) Bump stops are not allowed.

22. Springs:

- (a) Coil over springs must be 2.5" ID x 12" or 14" tall.
- (b) No barrel springs.
- (c) Minimum front spring rate 200#.
- (d) Maximum rear spring rate 500#.
- (e) Only one (1) spring per shock allowed.
- (f) Only one (1) spring rubber per spring allowed.
- (g) Maximum retail price \$66 per spring (MSRP).

23. Sway Bar:

- (a) One piece 1.25" sway bar only.
- (b) Sway bar mounts must remain stock as produced by RCF.
- (c) No quick adjusters allowed.
- (d) Sway bar must attach to right side lower shock mount only.
- (e) Left side sway bar must run on slapper plate.
- (f) All sway bar components must be magnetic steel.

24. Tires:

- (a) Hoosier 970 Tire only.

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- (b) All tires used during competition must be branded.
- (c) Each car will be allowed six (6) branded tires at their first race.
- (d) At each race after they will receive one (1) branded tire to race or bank.
- (e) No other tires will be allowed for competition.

25. Tread Width:

- (a) Front 63.5" max from center of tire to center of tire at spindle height.
- (b) Rear width must be 63" from center of tire to center of tire.
- (c) No wheel spacers allowed.

26. Transmission:

- (a) Must be magnetic steel.
- (b) Must be 3 speed Saginaw.
- (c) Stock OEM transmission with three forward and one reverse gear.
- (d) Transmission cannot be lightened or altered.
- (e) No polishing or coating internal parts.

27. Weights:

- (a) Minimum weight before event is 2750# with driver and safety gear.
- (b) Maximum left side weight before event with driver is 55%.

28. Wheelbase:

- (a) Wheel base must be 108" +/- half inch.
- (b) Wheelbase must be within 1/2" from side to side

29. Wheels:

- (a) Only 15" x 8" steel wheels allowed.
- (b) All wheels must be 4" backspace only.
- (c) Minimum wheel weight is 19#.
- (d) Lug nuts must be 5/8"-11 threads with a 1" hex outer dimension.
- (e) No gun drilled wheel studs.

No equipment or racecar will be considered as having been approved by reason of having passed through inspection 'unobserved', regardless of an S-2 car passing prior inspections, compliance with all rules must be made at each post inspection. Official's decision will be final.